

**Amendments to the Claims**

This listing of claims replaces all prior versions and listings of claims in the application:

1-15. **(Canceled)**

16. **(Currently Amended)** A method for treating a mammal suffering from a periodontal disease, comprising locally administering by injection in the proximity of the periodontal disease a therapeutically effective amount of a composition comprising at least one granulocyte-macrophage-colony stimulating factor (GM-CSF) polypeptide.

17. **(Canceled)**

18. **(Previously Presented)** The method of claim 16, wherein the periodontal disease is gingivitis or periodontitis.

19-20. **(Canceled)**

21. **(Previously Presented)** The method of claim 16, wherein the composition is administered by injection through the mucosal lining of the gingiva or by application in a periodontal pocket.

22. **(Previously Presented)** The method of claim 16, wherein said GM-CSF is present in the composition in a unit dosage amount of 5 µg to 800 µg.

23. **(Previously Presented)** The method of claim 22, wherein the unit dosage amount is 50 µg to 100 µg.

24. **(Previously Presented)** The method of claim 16, wherein the composition is administered at intervals ranging from once a day to once every third week.

25. **(Previously Presented)** The method of claim 16, wherein the composition is administered a total of 1 to 3 times for a period of one week.

26. **(Previously Presented)** The method of claim 16, wherein the composition comprises a therapeutically effective amount of at least one other active ingredient.

27-31. **(Canceled)**

32. **(Previously Presented)** The method of claim 16, wherein the composition is administered by injection into the alveolar mucosa.

33. **(Previously Presented)** The method of claim 16, wherein the composition is administered by injection into the sublingual mucosa.

34. **(Previously Presented)** The method of claim 16, wherein the composition is administered by injection into the palate part.

35. **(Currently Amended)** The method of claim 16, wherein the composition is administered by injection between the periosteum of the alveolar bone and the alveolar mucosa, and wherein a needle used for injection is inserted into a flexible oral muscosa region adjacent to the gingiva.

36. **(Currently Amended)** The method of claim 16, wherein the mammal is a human.

37. **(Previously Presented)** A method for inducing tooth calcification in a mammal, comprising locally administering by injection in the proximity of the periodontal disease a therapeutically effective amount of a composition comprising at least one granulocyte-macrophage-colony stimulating factor (GM-CSF) polypeptide.

38. **(Previously Presented)** The method of claim 37, wherein said GM-CSF is present in the composition in a unit dosage amount of 5  $\mu\text{g}$  to 800  $\mu\text{g}$ .

39. **(Previously Presented)** The method of claim 38, wherein the unit dosage amount is 50  $\mu\text{g}$  to 100  $\mu\text{g}$ .

40. **(Previously Presented)** The method of claim 37, wherein the composition is administered at intervals ranging from once a day to once every third week.

41. **(Previously Presented)** The method of claim 37, wherein the composition is administered a total of 1 to 3 times for a period of one week.

42. **(Previously Presented)** The method of claim 37, wherein the composition comprises a therapeutically effective amount of at least one other active ingredient.

43. **(Previously Presented)** The method of claim 37, wherein the composition is administered by injection through the mucosal lining of the gingiva or by application in a periodontal pocket.

44. **(Previously Presented)** The method of claim 37, wherein the composition is administered by injection into the alveolar mucosa.

45. **(Previously Presented)** The method of claim 37, wherein the composition is administered by injection into the sublingual mucosa.

46. **(Previously Presented)** The method of claim 37, wherein the composition is administered by injection into the palate part.

47. **(Previously Presented)** The method of claim 37, wherein the composition is administered by injection between the periosteum of the alveolar bone and the alveolar mucosa,

and wherein a needle used for injection is inserted into a flexible oral muscosa region adjacent to the gingiva.

48. **(Previously Presented)** The method of claim 37, wherein the mammal is a human.